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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,285	03/29/2004	Theodore R. Arneson	CS23014RL	2278

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EXAMINER	
CAI, WAYNE HUU	
ART UNIT	**PAPER NUMBER**
2617	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/812,285	ARNESON ET AL.	
	Examiner	Art Unit	
	Wayne Cai	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-19 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-19 and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed March 15, 2007 have been fully considered but they are not persuasive.

In response to the Applicant's arguments, the Examiner respectfully notes that it is the Examiner's position to give the broadest reasonable interpretation of the claim language. Therefore, the "speaker" of Farinelli is broadly and reasonably considered or interpreted as "electromechanical ambulation mechanism" because the speaker is the electromechanical mechanism as well known in the art.

Even though the term "ambulation" is defined as "to walk from place to place, or move about". However, in according to the Applicant's specification, the Applicant clearly defines the electromechanical ambulation mechanism comprises a linear vibration transducer. On the other hand, the speaker also comprises a transducer as known in the arr. Furthermore, the speaker does produce a slight shaking motion, which is also considered as an ambulation. Therefore, one skilled in the art would conceptualize the electromechanical ambulation mechanism as the speaker. Also, the Examiner respectfully suggests the Applicant to amend claim language to clearly define the phrase "electromechanical ambulation mechanism."

The Applicant further argues that the speaker is not "portable". The Examiner disagrees. Also, the term "portable" is broadly and reasonably interpreted as capable of

being transported or carried. Therefore, the speaker is obviously considered as the portable device because it could be carried or transported around.

Hence, previous rejections are upheld, and introduced once again below to serve as information purposes only.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 14-19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata (US 2001/0023197) in view of Noro (EP 1222971, Note: Applicant's cited reference), and further in view of Farinelli Jr. et al (hereinafter Farinelli", US 2004/0179710).

Regarding claim 14, Shibata discloses a handheld audio device comprising (i.e., a radio communication device):

a housing (fig. 1, casing 10), said housing holding:

a controller (fig. 2, control unit 140);

at least one memory storing a control program for operating the handheld audio device (fig. 2, memory 80), said at least one memory (memory 80) coupled to the controller (control unit 140);

an audio system (receiver 50 & microphone 40) coupled to the controller (control unit 140);

an ambulation system (vibrator 90 & vibration drive circuit 131) comprising:

a first drive circuit (vibration drive circuit 131) coupled to the electromechanical ambulation mechanism (vibrator 90), and coupled to the controller (control unit 140).

Shibata does not specifically disclose:

wherein the controller is programmed to drive the ambulation system in response to audio processed by the audio system; and

a first electromechanical ambulation mechanism having a first foot extending through a first opening in the housing for making contact with an external surface on which the handheld audio device is place.

In a similar endeavor, Noro discloses a device for driving vibration source. Noro further discloses wherein the controller is programmed to drive the ambulation system in response to audio processed by the audio system (paragraphs 0028 & 0029).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Shibata with Noro.

The motivation/suggestion for doing so would have been to entertain user when notifying the incoming call with the vibration and the sound corresponding to the melody of the musical tune.

Furthermore, Farinelli discloses an audio system. Farinelli further discloses a first electromechanical ambulation mechanism (i.e., speaker) having a first foot (i.e., first screw 106. Also, see fig. 1 and its descriptions) extending through a first opening (i.e.,

hole 104, 114, and 116) in the housing (i.e., frame 110) for making contact with an external surface (i.e., to make contact with the wall/ceiling) on which the handheld audio device is place (also see paragraphs 0026-0028, 0031).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Shibata in view of Noro, and further in view of Farinelli.

The motivation/suggestion for doing so would have been to support the housing and the electromechanical ambulation mechanism on the external surface.

Regarding claim 15, Shibata, Noro, and Farinelli disclose the handheld audio device according to claim 14 as described above. Shibata also discloses wherein: said audio system comprises a loudspeaker (receiver 50), and a second drive circuit coupled to the loudspeaker (signal processor 60 coupled to receiver 50).

Regarding claim 16, Shibata, Noro, and Farinelli disclose the handheld audio device according to claim 14 as described above. Noro also discloses wherein: the controller is programmed to digitally process digital audio to obtain processed audio and drive the ambulation system according to the processed audio (paragraphs 0047-0050).

Regarding claim 17, Shibata, Noro, and Farinelli teach the handheld audio device according to claim 16 as described above. Noro further teaches wherein: the controller is programmed to process digital music with a beat detection algorithm (detection circuit 18), in order to detect one or more beats (i.e., rhythm sounds), and operate the ambulation system so as to change a direction of movement of the

handheld audio device in response to the one or more beats (i.e., generating vibration in synchronization with the rhythm sounds). See paragraphs 0028-0029.

Regarding claim 18, Shibata, Noro, and Farinelli disclose the handheld audio device according to claim 14 as described above. Shibata also discloses wherein: said audio system comprises a microphone (microphone 40); and wherein the controller is programmed by the control program to: process input audio signals (signal processor 60) received from the microphone (microphone 40) to obtain processed audio; and operate the electromechanical ambulation mechanism (vibrator 90) according to the processed audio (paragraphs 0024 & 0030).

Regarding claim 19, Shibata, Noro, and Farinelli disclose the handheld audio device according to claim 18 as described above. Noro also discloses wherein: the controller is programmed to process input audio signals received from the microphone with a beat detection algorithm to detect one or more beats and operate the electromechanical ambulation mechanism to change a movement of the handheld audio device in response to the one or more beats (paragraphs 0028-0030).

Regarding claim 22, Shibata, Noro, and Farinelli disclose the handheld audio device according to claim 16 as described above. More importantly, the combination of cited references teaches or suggests a first drive circuit coupled to the electromechanical ambulation mechanism, and coupled to the controller, and a first electromechanical ambulation mechanism having a first foot extending through a first opening in the housing for making contact with an external surface on which the handheld audio device is place (see rejections of claim 14).

Although, the combination of references does not specifically teach or suggest a second electromechanical ambulation mechanism having a second foot extending through a second opening in the housing for making contact with the external surface on which the handheld audio device is placed; and wherein the first drive circuit is also coupled to the second electromechanical ambulation mechanism. However, it is obvious and/or well known in the art to incorporate the second electromechanical ambulation mechanism and couple it o the first drive circuit.

The motivation/suggestion for doing so would have been to increase the effect of the ambulation system. Also, see St. Regis Paper Co. v. Bemis Co., Inc., 193 USPQ 8, 11 (7th Cir. 1977).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Cai whose telephone number is (571) 272-7798. The examiner can normally be reached on Monday - Thursday from 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Wayne Cai
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